



NEWSLETTER OF THE LONDON CHAPTER,
ONTARIO ARCHAEOLOGICAL SOCIETY



December, 1985

85-9



Merry Christmas from the KEWA crew!

**Chapter
Executive**

President

Robert Pihl (225-2527)
R.R. No. 1, Granton

Vice-President

David Smith (432-0461)
372 Oxford Street, London

Secretary

Linda Gibbs (472-4915)
75 Fiddler's Green, London

Treasurer

George Connoy (631-6338)
762 Elm Street, St. Thomas

EXECUTIVE REPORT

The first item on our executive's November 21 meeting agenda was a review of the 28 KEWA questionnaire responses received from our readership. Results were as follows:

1) Would you like to see the research paper section of our newsletter reduced to save some postage costs?

Yes	No	Undecided
2 (7%)	23 (82%)	3

2) Should we separate newsletter production from other chapter operating costs by offering a two-fold membership rate - one without KEWA, the other including the newsletter?

Yes	No	Undecided
6 (21%)	18 (64%)	4

3) In order to provide the Chapter with operating funds and continue to produce the same quality newsletter, would you be prepared to accept a rise in individual membership fees to \$12.00/year?

Yes	No	Undecided
23 (82%)	4 (14%)	1

In light of the above, our membership will be requested to vote on a Chapter dues increase at the December 14 "meeting" in Thamesford.

Bob Mayer, our Nominating Committee Chairman, has presented the following slate of 1986 executive candidates:

President - Neal Ferris
Vice President - Linda Gibbs
Secretary - ~~Fred Turner~~ died
Treasurer - George Connoy

Local political commentators feel that Rob Pihl is a "shoe in" for Past President, while the remainder of the slate seems destined to success!

Upon due deliberation, it was decided by our executive that those speakers invited to participate in the symposium Lake Huron Basin theme session should be provided with an honorarium, as was done in 1980. Cheques will be sent when all other expenses have been paid and a final accounting of net income is available.

Bob Mayer reported that he will be meeting again with Mrs. Nancy Antone at Oneida concerning the Chapter's summer project. An immediate concern involves the processing and description of our artifact recoveries. Bob and Paul will be working on this material in Lobo. Volunteers can reach Bob most evenings at 666-0648.

The final report to our executive concerned a recent City of London Planning Department meeting which was attended by Chapter members Mike Gibbs and Bob Mayer. They were informed by the Planning Committee that archaeological concerns were not appropriate to a site level of planning; however, it was our members' feeling that archaeological concerns should be entrenched in all levels of city planning. Accordingly, they suggested that the Chapter strike a committee to liase with the City and our London LACAC.

Below is the exact text of the written communication received by Mike:

November 22, 1985

Mr. D. Micheal Gibbs
110-75 Fiddlers Green
London, Ontario
N6H 4S8

Dear Sir:

Re: Archaeological Policies

We Appreciate your interest in planning for London. As was stated at the Planning Committee on Monday, November 18, 1985, Council's site plan policies are not the appropriate policies to state concerns with archaeological policies.

The City does not now have Official Plan policies for archaeological conservation. However, as was mentioned, the Local Architectural Conservation Advisory Committee (LACAC) matters include archaeological conservation. The L.A.C.A.C. is working on proposed policies which may address this issue. I suggest you contact the secretary of The Committee, Terry Lafrance, if you wish to appear before this Committee. She may be contacted at the Clerk's Office (661-5417).

I would be happy to meet with you if you would like more information about the planning process.

Yours very truly,

Jerry Tikalsky
Planning Administrator - Long Term

SOCIAL REPORT

Chapter Christmas Party

This year's festivities will once again be hosted by the Keron family at their Thamesville home. Members who plan to attend are requested to contact Pat Keron during the evening at 285-2379, in order to coordinate potluck supper contributions. Speaking of contributions, our Chapter coffers will be paying for both a turkey and a generous bowl of punch this year!

Party time is 7:30 P.M. on Saturday, December 14. Dinner will be served around 9:00 P.M. - so don't be late! Come celebrate a great year.....

Thursday lab nites have continued through the fall and the Ministry wishes to express its sincere thanks to Bob Calvert, George Connoy, Megan Cook, the Gibbs, Bob Mayer, Fred Turner and Neal Ferris. A considerable amount of artifact processing has occurred and believe it or not, the Ansari project collection will finally have been completed (washing only!) by the end of next Thursday's session!

We are proud to present the following co-authored article, which represents another of our October symposium contributions:

THE ARCHAEOLOGY OF THE SOUTHEASTERN HURON BASIN

Brian Deller, Chris Ellis & Ian Kenyon

In this paper we summarize the Native occupation of the southeastern Lake Huron drainage (Figure 1). The major focus is the Ausable River, where most research has been carried out, but some reference will be made to the Maitland River drainage.

Although the Ausable has been a "glory hole" for relic collectors for well over a century, systematic archaeological research in the area did not begin until the work of Wilfrid Jury in the 1940's. Between 1949 and 1951, Thomas Lee inventoried and test-excavated Ausable sites as part of his southwestern Ontario archaeological survey. Data from Ausable sites were incorporated in Lee's pioneering formulation of the Glen Meyer complex. Lee's work was followed by an almost two decade hiatus in archaeological research. However, in the early 1970's Brian Deller began an intensive survey in the area, particularly to locate Paleo-Indian components. This culminated in the excavation of several Paleo-Indian sites, first in conjunction with Dr. William B. Roosa and later with Chris Ellis. Work on later cultures was revived in the 1970's. Stothers' 1972 survey of Pinery Provincial Park revealed a substantial Woodland occupation. Beginning in the mid-1970's, the Ontario Ministry of Citizenship and Culture became involved in work in the southeastern Huron basin. This included survey and test-excavation on sites ranging in age from Late Archaic to Historic.

Geology and Natural Environment

The geology of the Ausable River area (Cooper 1979) is most crucial for the interpretation and dating of sites. A dominant topographic feature is the Wyoming moraine which was formed during the Port Huron ice advance of ca. 13,000 B.P. As the ice retreated, pro-glacial Lake Warren was formed ca. 12,500 B.P. between the ice front to the north and the Wyoming moraine. Although there is no evidence of human habitation during Lake Warren times, the well-developed fossil beaches (Figure 1) proved attractive for settlement in later periods. By ca. 12,000 B.P. the water level had dropped to form Lake Algonquin. At this time a spruce-dominated forest covered the region, although this gave way to a pine-dominated vegetation cover by ca. 10,600 B.P. (Karrow et al. 1975). Around 10,400 B.P., and lasting until ca. 5500 years ago, water fell from the Lake Algonquin level ultimately to the Stanley low stage. In this stage, the lake margin was far to the northwest of the present shoreline and consequently any lakeshore sites that existed at this time would now be drowned by modern Lake Huron. During the Lake Stanley low stage, deciduous forest elements became more prominent and essentially modern vegetation cover was established by ca. 8000 - 7500 B.P.

By 5000 years ago, Huron basin water levels were rising again, so by 4500 B.P. Lake Nipissing had attained the same level as the former Lake Algonquin (Cooper 1979; Karrow 1980). This Nipissing transgression effectively reworked and destroyed the older Algonquin Beach features in the Ausable - Maitland area. However, there is evidence that the Algonquin beach was in essentially the same position as the relict Nipissing beach in the area today. During Lake Nipissing times, the lake formed a large bay in the Ausable area (known as the Thedford embayment), resulting in the creation of a massive baymouth bar in what is today Pinery Provincial Park. Moreover, this Nipissing inundation submerged a number of archaeological sites occupied in post-Algonquin times on the old Algonquin lake bed. Consequently, artifacts from sites submerged by Lake Nipissing are often waterworn, exhibiting a deep brown "patina" and smoothed, polished surfaces.

By 4000 B.P. water levels were falling to what is essentially the modern Lake Huron level. The former bay area of Lake Nipissing, the Thedford Embayment, was isolated from Lake Huron by a series of sand dunes formed on the Nipissing baymouth bar. This created a low, marshy basin containing a small body of water known as Lake Smith. Today, this lake and marsh have been drained to create fields for market gardening.

The complex and varied geological events outlined above have all left their traces on the environment of the lower Ausable drainage. Consequently the flora and fauna of the area are both rich and diverse, making this area an attractive place for human settlement. As we will see, there is evidence for fairly intensive occupation throughout most of the prehistoric sequence. The Ausable also represents the northernmost extension of the Carolinian Biotic Province on the Ontario side of the Huron shore. To the north, in the Maitland drainage is the less rich Canadian Biotic Province. Having done survey work in both the Ausable and Maitland Rivers, our impression is that site density, and likely prehistoric population density, was significantly higher in the Ausable.

There is a significant chert source in the Ausable area, which outcrops on the western side of Kettle Point (Janusas 1984). In the Ausable and even the Maitland, Kettle Point chert was a widely used raw material, except in the Early Paleo-Indian period.

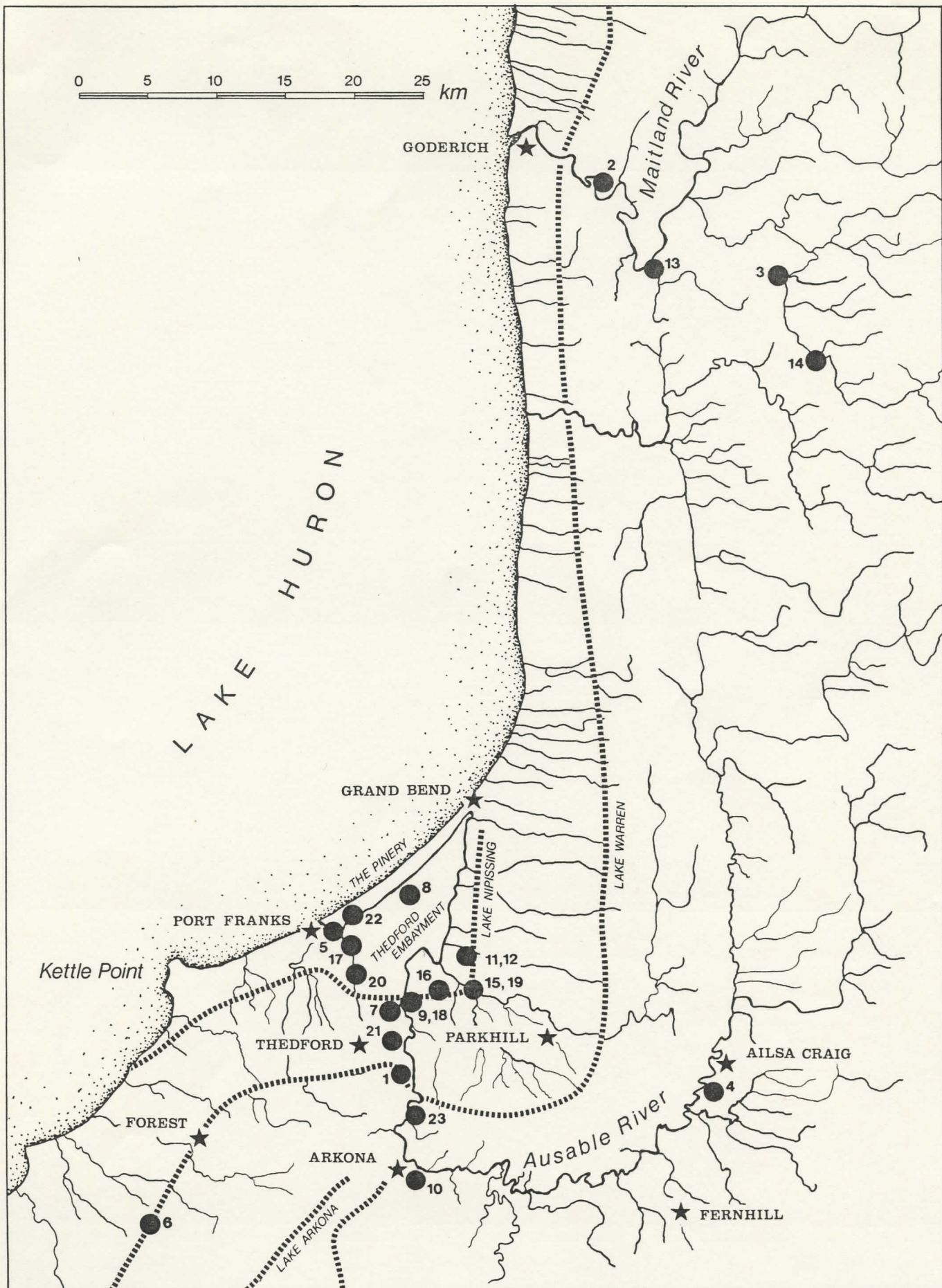
Early Paleo-Indian

In contrast to many other areas of the Great Lakes, the fluted point associated occupation of the lower Ausable area is one of the best known of the prehistoric occupations (see Deller 1976a, 1979).

At least three distinct fluted point types occur in the eastern Great Lakes. These are used as

Figure 1. The Southeastern Huron Basin. Broken lines show the major fossil beaches. The Wyoming Moraine, which so dominates the topography of the area, is a 5 to 10 km wide band located immediately to the east and southeast of the Lake Warren fossil beach. Stars indicate modern communities referred to in the text. Filled circles are key archaeological sites mentioned in the text:

1. Adder Orchard
2. Ben Miller - Williams
3. Boven
4. Bovin
5. Burley
6. Byrns
7. Crawford
8. Cutler
9. Davidson
10. Faulds
11. Haunted Hill
12. Heaman
13. Kaastra
14. Kinburn Road
15. Parkhill
16. Pascoe
17. Port Franks Burial
18. Sadler
19. Simons
20. Tedball
21. Thedford II
22. Vandenbygaart
23. Wyoming Rapids



diagnostic indicators of three fluted point complexes or industries. From presumed earliest to latest these industries are Gainey (Simons et al 1984), Parkhill (Roosa 1977b) and Crowfield (Deller and Ellis 1984). We suggest that these date between 11,000 and 10,400 B.P. based on C-14 dates from other areas of Eastern North America and the fact that no fluted points are known from undebatable contexts clearly within the confines of pro-glacial Lake Algonquin (or in the case here, Lake Nipissing - inferred Algonquin). This general age suggests the occupations were either in a spruce-dominated parkland or a slightly later pine-dominated closed forest or both.

All three recognized fluted point complexes occur in the Ausable. The Gainey and Crowfield complexes are known only through isolated surface finds in local collections that have no precise provenance. For example, a complete Gainey point of Upper Mercer (Ohio) chert has been found in the Fernhill vicinity (Figure 2:1).

The best represented fluted point industry is Parkhill of which Barnes points (Figure 2:2; Roosa 1965) are the diagnostic indicator. At least 8 sites of this industry are known from the lower Ausable. Moreover, there are 10 other locations which, although lacking points, have yielded debris and tools on the chert lithic material diagnostic of the Parkhill industry in this region of Ontario (see below). The predominance of Parkhill industry sites versus those of the other known complexes probably indicates more extensive use of the area during Parkhill industry times.

Most of the Parkhill industry sites are known only through surface collections although one site, McLeod (Ellis 1979, 1984), has been test-excavated and two others, Parkhill and Thedford II, have had more extensive excavation. These latter two sites will be briefly summarized here.

The Parkhill site was the first major fluted point site to be excavated in Ontario. The site is located near a right-angled bend of the Lake Nipissing/Algonquin shoreline near Parkhill Creek. Excavations were carried out between 1973 and 1975 under the direction of Dr. William B. Roosa of the University of Waterloo. The site consists of at least 10 discrete concentrations of Paleo-Indian material. Each concentration could be conceived of as a separate site or at least, treated as such for analytical purposes. Although several of these concentrations were test-excavated, extensive excavation was carried out in only two of these, referred to as Grids or Areas B and C. Only preliminary reports (Roosa 1977a, 1977b; Roosa and Deller 1982), ancillary studies (Parlish and Sheppard 1983) and unpublished theses (Ellis 1979; Deller 1980) contain information on the site.

Although the criticism has been raised that the preliminary published reports focus largely on fluted points from the site (i.e. MacDonald 1983: 98-99), this focus is not really surprising as the two main excavated areas consist largely of points and point-making debris. For example, over 2000 square feet were excavated at Grid B and of the ca. 95 tools/preforms at this locus, over 90% are fluted bifaces, unfluted preforms or derivative forms such

as small points made on channel flakes. As well, almost all lithic debris from the area is from fluted biface reduction and includes over 130 channel flakes. A highly specialized fluted point production area of this size has never before been reported. Similarly, while the Grid C assemblage indicates a wider range of activities, over 50% of this assemblage are fluted bifaces or preforms. These two areas though cannot be considered typical of the site as a whole since surface collections suggest more diverse activities in other concentrations. Several possible Paleo-Indian features were encountered in the excavations. Although none yielded materials datable by conventional C-14 dating techniques, a widely discussed pollen sample was recovered under one feature. This, by latest reckoning, was a sample characteristic of the earlier spruce-dominated parkland (see Jackson 1978; Roosa and Deller 1982). However, this sample probably slightly pre-dates the occupation.

The Thedford II site is located on a terrace overlooking a ravine, just west of the Ausable river (Deller and Ellis 1982, n.d.; Ellis 1984; Greco 1985). Because of the extensive remodelling of the Ausable Valley by Post-Glacial Lake Nipissing, the exact situation of the site relevant to Lake Algonquin is unknown although certainly the site was located above the Algonquin water plane. Approximately 500 square meters of the main site area were excavated in 1981 and 1982. Unlike excavated areas at Parkhill, fluted bifaces (and debris from point manufacture) were relatively rare (ca. 20% of the assemblage). Moreover, the total assemblage of fluted bifaces useful for comparing inter-site differences is actually much less than 20% as this total includes as many as 13 fluted points and preforms complete (except for recent breaks) which were recovered from one small area on the site. These are undoubtedly part of a cache. The cache was restricted to the plowzone and to a tile trench dug by the landowner. It included points which are long and exhibit little or no evidence of reworking or resharpening as well as several long preforms which would require only lateral basal grinding and selective marginal or edge retouch to make them into finished points (see Storck 1984: Figure 2). In contrast to the excavated areas at Parkhill, the Thedford II assemblage also includes numerous graters or piercers (ca. 12% of the assemblage), a number of end scrapers (ca. 30% of the assemblage) and several side scrapers (ca. 10%) of various forms.

Overall, excavations and surface collections from Parkhill industry sites in the lower Ausable area have provided a foundation with which we can begin to understand the fluted point associated occupation of the Great Lakes area. First, they have provided a good sample of fluted bifaces with which to document and evaluate Great Lakes fluted point types and construct cultural-historical frameworks. Second, the investigations have revealed several very distinctive tool forms useful for identifying Paleo-Indian sites. These include biface tools with a flat back along one margin (i.e. Deller 1979; Ellis 1984: Figure 6-12a); very large bifaces with alternately beveled tip margins produced through resharpening (Roosa and Deller 1982: 5); and,

specialized end scrapers with very narrow bits which have sometimes been referred to as chisel graters or erroneously as "beaks" (Ellis 1984: 211-213). Third, the investigations have resulted in information on the chert sources exploited and thus have provided some data on patterns of movements of Paleo-Indian groups on a seasonal round. On all Parkhill industry sites in the lower Ausable region, "Collingwood" chert from the Fossil Hill formation (Storck and Von Bitter 1981), which originates some 175 km northeast of the site, is the dominant material accounting for over 80% of each assemblage. This suggests, along with information from other sites in the Great Lakes area, that there is no gradual distance decay in material usage as one moves away from the source such as characterizes most, if not all material usage by later groups. In addition, almost all the assemblages in the Ausable include a small number of tools on Bayport chert from Michigan which is suggestive of exchange and other forms of social interaction with groups in surrounding areas focusing on other chert types.

Fourth, inter-assemblage variability in tool inventories is evident and the translation of such variability into activity differences and the documenting of patterning in such variability holds much promise in constructing models of Paleo-Indian seasonal-settlement systems. Finally, the available data have suggested major differences between Great Lakes groups and Paleo-Indian groups in other areas of Eastern North America. For example, point production and use appears to be much more common on the great Lakes sites such as Parkhill or alternatively, in contrast to other eastern Paleo-Indians, specialized areas were put aside for almost the sole purpose of producing such items. Also, Great Lakes area sites and particularly those in the Ausable, include several tool forms not reported from other areas of the East such as the large alternately beveled bifaces and "chisel graters" noted above. Similarly, tools such as piece esquillees, fluted "twist" drills, and the limaces or "flake shavers" which are extremely common on sites elsewhere in the East such as Debert (MacDonald 1968), Vail (Gramly 1982) or Bull Brook (Grimes 1979) and which are often considered to be "typical" Paleo-Indian artifacts, are non-existent or extremely rare on Parkhill industry sites. In sum, the often extreme assumed homogeneity of Paleo-Indian materials is breaking down with continued research.

Late Paleo-Indian

In contrast to fluted point assemblages, Late Paleo-Indian assemblages including unfluted points are much rarer. Nevertheless, within the lower Ausable River area several locations with such materials are known. These can be divided into two groups. The first group includes the Tedball site, which has produced materials like those from the Holcombe site in Michigan (Fitting et al 1966). The Tedball site is noteworthy in that it is located almost a kilometer lakeward of the post-glacial Nipissing shorecliff and, because of this, can be assumed to have been located well within the area covered by pro-glacial Lake Algonquin. This implies that it is more recent than ca. 10,400 B.P. and probably

post-dates fluted point associated occupation of the area. Since the site is definitely within the area flooded by Lake Nipissing, all artifacts from the site are waterworn. This makes material type difficult to identify but Kettle Point chert from the northwest edge of the study area is definitely included. The small surface collection from the site includes one complete Holcombe point (Figure 2:3) and several "typical" Paleo-Indian artifacts such as graters, a concave side scraper or "spokeshave" and end scrapers. These latter tools are quite small and this characteristic appears to distinguish many Late Paleo-Indian assemblages from the larger end scrapers found on earlier fluted point sites.

The second grouping of Late Paleo-Indian sites is characterized by the presence of lanceolate to stemmed "Plano" forms with ground lateral edges (Figure 2:4). These bear resemblance to the Agate Basin and Hell Gap points of the western Plains. Variability in Plano forms suggests they might represent some degree of temporal and/or perhaps, functional variation. The best known site is Heaman (Deller 1976b, 1979) and it, as well as three other sites, are below the Nipissing water plane and hence, have yielded water-worn artifacts. In addition to projectile points, these sites have also yielded other water-worn artifacts such as bifaces, end scrapers and massive graters or borers which are reminiscent of earlier Paleo-Indian forms, as well as flaking debris. Whether these other forms are associated with the points is not totally clear since there are other waterworn points of later vintage from some of these sites. Although many of the Plano points are heavily "patinated", most appear to be made from Kettle Point chert with the occasional Onondaga and Bayport chert specimen.

Early and Middle Archaic

Several locations in the lower Ausable River area have yielded one or more notched or stemmed points indicative of Early and Middle Archaic occupation. We assign these artifacts to this period based on external comparisons to well-dated sites reported elsewhere as well as demonstrable evidence from the study area that such points were used contemporary with or prior to the draining of Lake Nipissing (ca. 4500 to 5000 B.P.). In sum, we arbitrarily end the Middle Archaic with the draining of this lake.

Possibly the earliest of these manifestations is represented by Hi-Lo points (Fitting 1963). Based on Hi-Lo point morphology and on tool forms associated with the points, it has been argued elsewhere (Ellis and Deller 1982) that this material is not only early in age but also, appears to be similar to the "Dalton" materials of the Mid-West to southern United States. As such, it should date to ca. 10,000 B.P. and along with some other Early Archaic materials to be discussed below, in fact may be contemporary with some of the Plano materials. However, the situation is far from clear. Although present, only 10 isolated Hi-Lo points are reported from the study area and none of these are below the Nipissing beach level. This low number of finds contrasts markedly with the large number of Hi-Lo sites and finds found farther

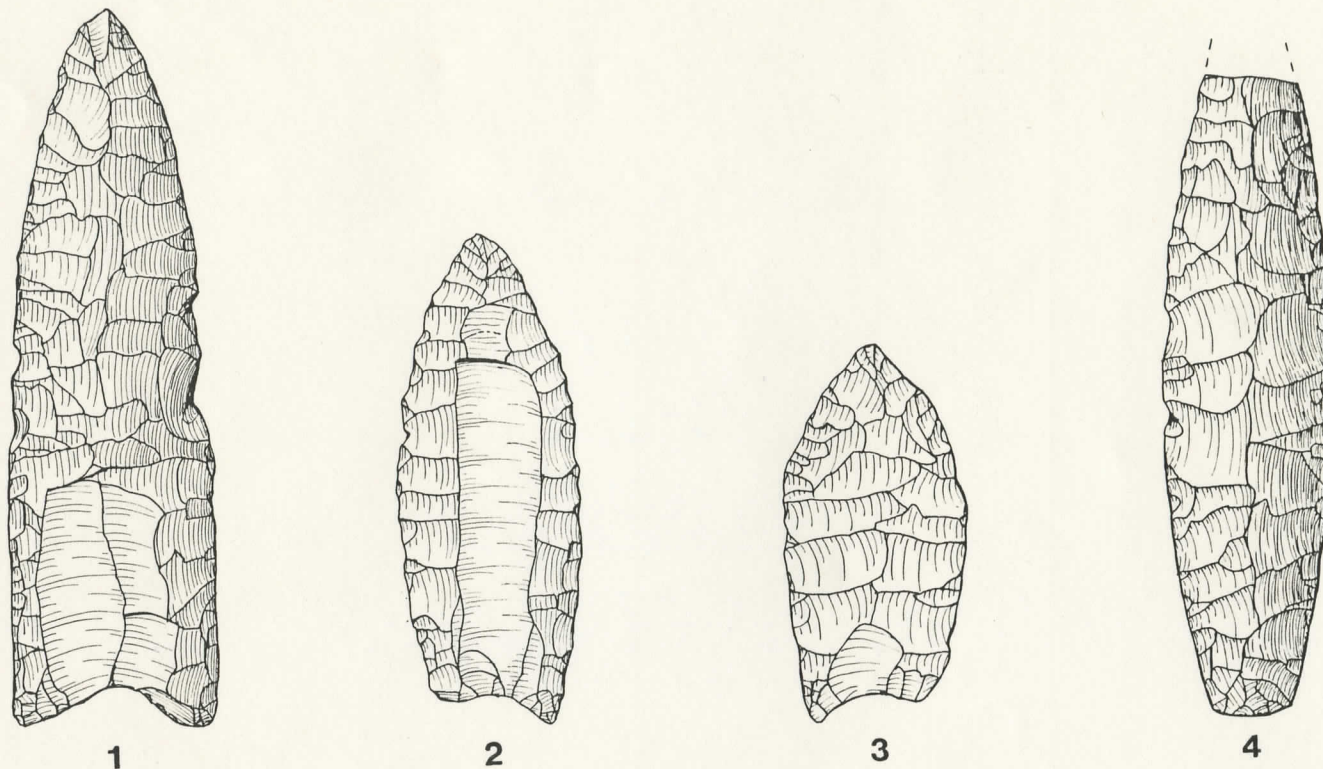


Figure 2. Paleo-Indian Points. (1) Gainey fluted point, Upper Mercer (Ohio) chert, Fernhill vicinity; (2) unfinished Barnes fluted biface, Collingwood chert, Thedford II site; (3) water rolled Holcombe point, probably Laurel (Indiana) chert, Tedball site; (4) water rolled Plano point, Onondaga chert, Heaman site. (Drawings actual size.)

to the south.

Early Archaic materials, which presumably post-date Hi-Lo, are represented by a few finds of corner-notched and bifurcated points. At least four, small, Onondaga chert, serrated, corner-notched points lacking basal or notch-grinding were recovered from surface collections at the Parkhill site. These are reminiscent of the Kirk corner-notched points which date between 9500 and 8500 B.P. in the southeastern United States. Such points are very common in more southern areas of Ontario where they are generally referred to as Nettling points (Fox 1980). As well, there is at least one point similar to the Thebes type (Winters 1963).

Bifurcate-based points have not been recovered in any quantity and only three locations of finds are known. Comparable materials date to ca. 8900 to 8000 B.P. in the southeastern United States (Broyles 1971; Chapman 1975, 1976, 1977, 1978, 1979). While some are like specific types of bifurcate points described in the literature, others can not be clearly related to southeastern types.

There are at least two categories of point forms from the area that should date to the Middle Archaic. The first includes a number of isolated finds with stemmed and concave bases (Figure 3:1). These are highly reminiscent of points in the Middle Archaic Stanly stemmed cluster of southeastern U.S. or Neville Stemmed of New England (see Dincauze 1976) which date to ca. 8000 to 7500 B.P. One example from the Heaman site is made from Onondaga chert and has been waterworn by Nipissing wave action.

The second category consists of corner and side-notched points recovered from several locations along the Nipissing beach. We suspect that these points post-date the previously described forms although this is largely speculation. Certainly, they date prior to the Nipissing draining as some are waterworn. Some of these points (Figure 3:2,3) are comparable to those recovered by Lovis (1983) from the Middle Archaic occupation zone at the Weber I site in Michigan, radio-carbon dated to between ca. 6200 to 4500 B.P.

Late Archaic

There is evidence for at least two post-Nipissing Archaic complexes in the Ausable. The most conspicuous of these is characterized by large, broad bladed straight stemmed points (Burgar 1985; Kenyon 1980a, 1980b). Typically, these broadpoints are 6 to 10cm long, and are made of a variety of materials, including Kettle Point and Onondaga Chert, as well as from coarse grained rocks. In the Ausable, the use of coarse grained rocks for the manufacture of bifaces is virtually unique to this period. These coarse grained rocks, chiefly greywacke, were undoubtedly obtained from local glacial deposits. In Southwestern Ontario, greywacke points are rarely found east of London (Kenyon 1985). The form of these points and the use of coarse-grained lithics links these Ausable sites with the so-called Satchell complex of southeast Michigan and northwestern Ohio. As well, some point forms are similar to the Genesee points of the New York Batten Kill phase.

Two Ausable Broadpoint sites, Davidson and Sadler (Kenyon 1978, 1979b, 1980a, 1980b), are located below the Nipissing water table. Unlike some of the Middle and Early Archaic material described earlier, the artifacts from these Broadpoint sites are neither water rolled nor deeply stained, suggesting that these components must date to sometime after the Lake Nipissing high water level of ca. 2500 B.C. In fact, both Davidson and Sadler are located atop of sand deposits likely formed during Nipissing rather than Algonquin times. At Davidson (Kenyon 1978), for example, the Archaic horizon is underlain by a five meter thick sand deposit containing numerous specimens of the fresh water snail *Goniobasis livescens* which Miller, Karrow and Kalas (1979) have identified as a type fossil of Nipissing but not Algonquin deposits. This post-Nipissing assignment is supported by radiocarbon dates from three Ausable sites. Davidson has yielded a reading of 1830 B.C., and Adder Orchard (Kenyon 1983) a date of 1900 B.C. (another date of 410 B.C. from this site would seem to be too late). There is another possible broadpoint carbon date; this is from a feature at the Parkhill site that produced a large, greywacke bifacial reduction flake and yielded a C-14 reading of 1450 B.C. Thus the carbon dates for the Ausable broadpoint sites fall within the 1400-2000 B.C. period, which is close to the chronological estimate for the Batten Kill phase of New York, but about 500 years earlier than the available carbon dates for the Satchell complex of Michigan and Ohio.

There are some differences between point forms on Ausable sites. Sites like Davidson and Sadler have relatively broad-bladed points (Figure 2:4), similar to the Genesee points of New York. In contrast, certain other sites, notably Adder Orchard (Kenyon 1983), have points with narrow, lanceolate blades (Figure 2:5), similar to those from the Pinegrove Cemetery site in Michigan. Although it has been speculated that broad bladed points tend to be earlier than narrow bladed ones (Kenyon 1980b, 1983), so far there is little convincing evidence for this.

The rest of the Broadpoint assemblage is not impressive. There are a few lanceolate greywacke bifaces (Kenyon 1979c) that display a distinctive rubbing use-wear on their tips. There are also simple end scrapers, retouched flakes, and drills, which are sometimes fashioned from stemmed points. Although there are cobble hammerstones and whetstones, little in the way of ground stone tools can be associated with Ausable Broadpoint sites.

Evidence for subsistence is limited. Carbonized nutshell, mostly black walnut, has been recovered from features at the Adder Orchard and Davidson sites. Davidson has also yielded some badly weathered animal bone, most of it deer, although a fragment of spiny soft shell turtle was also recovered. Davidson also produced evidence of a dog burial (Kenyon 1979b). There is some suggestion that many of these Ausable Broadpoint sites were located near nut-producing forests (Kenyon and Payne 1981).

In the Ausable drainage, there are indications of a Terminal Archaic complex post-dating the Broadpoint material. In other areas of the Huron Basin, sites dated and guess dated to the 500 - 1500 B.C. period are characterized by small to medium

sized corner-notched points, as, for example, in the Inverhuron Archaic of Bruce County (Ramsden n.d.; Wright 1972) and the Terminal Archaic component of the Weber I site in Michigan (Lovis 1983). Scattered surface finds suggest the presence of such a "Small point" Archaic complex in the Ausable.

Moreover, during excavations at the Thedford II site, evidence of a probable occupation of the site during Terminal Archaic times was uncovered. The assemblage includes a series of small, thin, well-made, diagonally-notched points as well as other tools. At least four features were found which can be confidently associated with this occupation of the site. Generally, these were shallow and oblong and, in addition to fire-cracked rock and flaking debris, contained varying amounts of charred vegetal material. Identified woods included white ash, beech, elm and oak. Charred blackberry and raspberry seeds and butternut shell were recovered through flotation. One feature was deeper and more circular than the others and in addition to a small side-notched end scraper and charred plant materials, included several bone and antler fragments which could be identified as deer. Charcoal samples from this feature have been submitted for C-14 dating.

One other site that should fit somewhere within the 500 - 1500 B.C. period is the Port Franks burial reported by Wilfrid Jury (1978). Located in an eroding sand dune near Port Franks, this single burial was covered by a dense layer of red ochre, and contained a rich complement of grave goods, including a copper celt, copper beads and awls, antler points, bear canines, galena cubes, flaked chert T-base drills and medium sized corner-notched points. The presence of a three-holed marine shell gorget indicates that the Port Franks burial is related to the so-called "Glacial Kame mortuary complex".

Early Woodland

The Early Woodland culture of southwestern Ontario is the Meadowood phase (Spence and Fox n.d.). Typical of Meadowood are the thin, well-made, side-notched Meadowood points, and thick-walled ceramic vessels with cordmarking on exterior and interior ("Vinette I").

Small Meadowood sites are scattered along the Ausable in the Pinery vicinity (Kenyon 1980c), along the edge of the Thedford embayment and up the Ausable river at least as far as the Wyoming moraine. There is one carbon dated component: the basal layer of the stratified Wyoming Rapids site (Kenyon 1979a). There a small cluster of fire-cracked rock and sherds from a single vessel were recovered from a depth of two meters below the present land level, and below a dated Middle Woodland horizon. Associated with the rock/sherd cluster were a few chert flakes, some deer bone and walnut shells. The sherds are typical Vinette I, with oblique cordmarking on the exterior and horizontal cording on the interior. The vessel likely had a conoidal or subconoidal form, with no indication of lugs or flat bottoms as is characteristic for Early Woodland vessels in Michigan. The carbon date for the rock/sherd cluster was 530 B.C., very close to

determinations for other Meadowood sites in Ontario. Vinette I pottery has also been found on three sites in the Pinery area near Lake Huron (Kenyon 1980c), one site yielding a side-notched point base made of Kettle Point chert. No Meadowood ground stone exotica has been found in modern Ausable excavations but "old time" collections contain coveys of birdstones (as for example in the ROM). Although no definite burials for this period have been identified in the Ausable, in the early part of this century a cache of 166 Onondaga chert blades was found near the entry of the Ausable into the Thedford embayment (ROM collection; Fox pers. com.). To the north in the Maitland River, some Vinette I pottery has been found at the Ben Miller - Williams site.

Middle Woodland

There is abundant evidence of Middle Woodland in the Ausable with something in the vicinity of 50 known sites. Wilfrid Jury was the first to recognize Middle Woodland ceramics on the Ausable, notably in his 1950 salvage excavations at the Burley site (Jury and Jury 1952), near the mouth of the Ausable. Jury's excavation revealed three strata; while the upper two occupations could be identified as Iroquoian, the bottom stratum contained some curious dentate stamped pottery which, although seemingly related to the Point Peninsula culture of New York, was much more crudely made. With James Wright's 1963 definition of the Saugeen Focus of the Middle Woodland period, Jury's lower Burley stratum had finally found a taxonomic home. The abundance of Saugeen period sites in the Ausable was demonstrated by Stothers' 1972 survey of Pinery Provincial Park, which located several dozen components. In the course of his survey, Stothers test excavated the Saugeen phase Vandenbygaart and Cutler sites.

The Ausable Saugeen pottery is similar to pottery described by Wright (1963) and Finlayson (1977) for the Saugeen River sites. Vessels are thick and coarsely tempered, and rims flare out somewhat. They are decorated with dentate, pseudo-scallop shell or plain linear stamping, sometimes used with a rocker motion. The rims are often decorated with oblique or criss-cross stamping, below there are either further bands of obliques or horizontal motifs. Saugeen points tend to be long, and have expanding stems (Figure 3:6). Usually these are made of Kettle Point chert, unlike the earlier Meadowood and Broadpoint complexes where Onondaga cherts were often used. There is evidence of trade in exotic cherts, since a number of showy bifaces of such Ohio cherts as Upper Mercer and Flint Ridge have been recovered from several surface sites (e.g. Simons). Little is known about the Middle Woodland bone industry; however, there is a remarkable locale in Parkhill Creek, where numerous bone and antler tools have been dredged from the muck bottom. Since this spot is flanked by land based Saugeen sites (e.g. Simons), much of the bone likely dates to the Middle Woodland period. Regrettably, most of these tools have disappeared into the hands of private collectors, although Wilfrid Jury obtained a spectacular engraved bone comb for the Museum of Indian

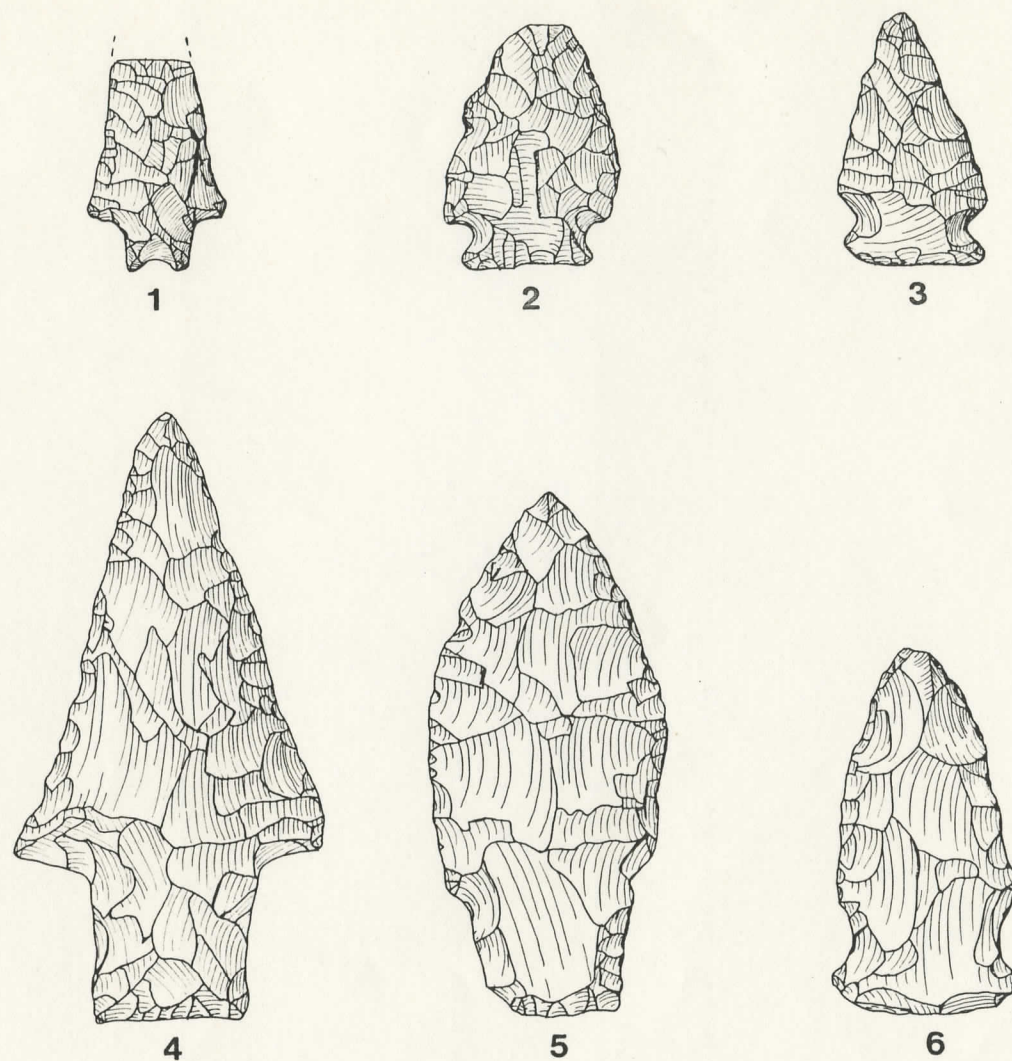


Figure 3. Archaic and Woodland Points. (1) Stanly Stemmed-like point, Kettle Point chert, Parkhill site; (2 & 3) water rolled Middle Archaic points, Kettle Point chert, Pascoe site; (4) Genesee point, Onondaga chert, Sadler site; (5) Adder Orchard point, Kettle Point chert, Haunted Hill site; (6) Saugeen point, Kettle Point chert, Simons site. (Drawings actual size.)

Archaeology.

Most of the Ausable Saugeen sites cannot be accurately dated, aside from assigning them to a rather broad period between roughly 500 B.C. and 500 A.D. There are only three carbon dates for the Ausable Middle Woodland, and these are not entirely satisfactory. Jury's solid carbon date of 668 B.C. for the lower stratum of the Burley site would seem to be too early. Stothers' 670 A.D. date for the Vandenbygaart site (run on a bone sample) seems to be too late. Perhaps more acceptable, is a 150 B.C. date from the Middle Woodland occupation of the Wyoming Rapids site (Kenyon and Fox 1983).

There is enough information on the Ausable Saugeen to say something about their seasonal settlement round, and it would appear to be much like that proposed by Finlayson (1977) for Bruce County. In spring, exploitation of fish spawning runs brought together a number of family groups to form a "macroband settlement". As with the Donaldson site on the Saugeen River, there are major sites on the Ausable and Maitland at major rapids, where spawning fish could be taken easily. A key spring fishing site on the Ausable is at Wyoming Rapids, located on a riffle where the Ausable cuts through the Wyoming Moraine. At this stratified site there is a Middle Woodland occupation extending for over 100 meters along the eroding river bank. The cultural horizon is visible as a dark, organically stained, 10cm thick band, with dense patches of fishbone, clearly reflecting the exploitation of spring spawning fish. For example, a sample of bone analyzed by Rosemary Prevec (in Kenyon and Fox 1983) resulted in the identification of 2 deer, 1 chipmunk, 6 walleye and 1309 sucker elements.

There are numerous sites located within 2 km of the Huron shore along the Ausable River in the Pinery and Port Franks sand dune area. Unlike the Wyoming Rapids site most of these components are quite small and seemingly represent microband camps. Peter Hamalainen's (1975) analysis of the well preserved faunal remains from the Vandenbygaart site indicates a summer occupation. In contrast to the Wyoming Rapids site, Vandenbygaart displays a much wider diversity of animal species. Terrestrial animals include deer, bear, hare and dog. Bird is not common although Passenger Pigeon is present. There is a good range of aquatic species: beaver, muskrat and racoon; turtle is comparatively common. Fish include drum, bowfin, sturgeon, sucker, perch, catfish, and bass family; netsinkers are common finds on the Pinery sites. Another important activity on littoral sites was flint knapping, large quantities of chipping debris and preforms being recovered from a number of components, notably by Jury at several sites in the Port Franks area; and at the Cutler site in the Pinery excavated by Stothers (1972) and later by Pihl (1981).

There are also a number of Saugeen components located near the edge of the Thedford embayment, especially where streams cut through the Nipissing shore line. The seasonality of these sites is uncertain.

Possibly late fall or winter hunting camps of the Ausable Saugeen peoples may be represented on a series of sites near Ailsa Craig some 25 km from the

lake. Although none of these sites has been excavated, one component, the Bovin site, has yielded pottery, resharpened Saugeen points and some deer bone. It may be no coincidence that the Ailsa Craig area was a well known winter hunting ground for native groups in the early 19th century, some 120 deer skins reportedly being taken in the winter of 1836.

There is less information on the Saugeen of the Maitland River (Kenyon 1984; Fox in Beecroft 1984), but a similar seasonal round is indicated. The largest component is the Ben Miller - Williams site, adjacent to a major rapids of the Maitland River. Like the Wyoming Rapids site, Ben Miller - Williams is located at the point where the river penetrates the Wyoming Moraine. Ben Miller - Williams is presumed to represent in part a spring season fishing camp, although analysis of the poorly preserved faunal assemblage indicates that the site may have been used in other seasons as well (Cooper 1981). In the Maitland, an ideal place for a summer camp would have been near the mouth of the Maitland in present-day Goderich harbour. Unfortunately owing to modern development nothing is known of the prehistory of the harbour vicinity, although in historic times this area was used as a summer camping ground by the Ojibwa. Late fall or winter camps may be represented by several small components some 20 km from the lake shore near the Hullett Swamp (Kenyon 1984). Remains from these sites are sparse. For example, repeated surface collecting of the Boven site at the northern end of the swamp has produced only a single point and a single potsherd. At the southern end of the swamp, a single Middle Woodland feature containing a fragmentary ceramic vessel has been located at the Kinburn Road site.

Late Woodland

There are numerous recorded Late Woodland sites in the Ausable-Maitland area. Yet solid knowledge concerning this period in the area is scanty. Little is known about site size or structure, almost nothing about subsistence practices. A measure of our ignorance is the fact that there is not a single Late Woodland carbon date for this period in the Ausable-Maitland area. Even the cultural identity of the Late Woodland complexes is not entirely clear. In short the Late Woodland of the Ausable-Maitland is much like those house-for-sale ads -- "a handyman's dream".

Possibly the earliest Late Woodland complex of the Ausable area is represented by cord-marked and linear stamped pottery, which Stothers (1976) initially defined as the "Ausable focus" of his Princess Point complex, based on a number of components in the Pinery. Similar material has been recovered from the Kaastra site on the Maitland (Kenyon 1984). Recently, however, William Fox (1982) has called this identification into question, suggesting that the Ausable material might be linked to the Younger tradition of southeastern Michigan and extreme southwestern Ontario.

Another, apparently separate, complex is characterized by cord paddled ceramics with

decoration usually confined to cord-wrapped stick impressions on the lip. This material has a general similarity to the Wayne wares of Michigan. Small sites containing this pottery are found in the Pinery area, further up the Ausable River, and in the Ben Miller locale on the Maitland.

Glen Meyer material is relatively abundant in the Ausable. A number of Glen Meyer components were identified by Thomas Lee (1951, 1952) in his surveys (e.g. Faulds), and additional site inventory has been done by Stothers (1972), Fox, and Mayer, Pihl, Poulton and Associates (1985a, 1985b, 1985c). By the "classical" standards of the Norfolk sandplain Glen Meyer, Ausable ceramics are relatively crude; although some vessels display elaborate incised decorations extending over much of the exterior surface (e.g. Powell and Stanton 1972: Figure 22; Lee 1958: Figure 8, which shows a vessel from the Faulds site).

"Late" Glen Meyer or Uren-like sites are also present, these include the Crawford site excavated by Wilfrid Jury in 1947-48. In his report Jury (1948) described but did not adequately illustrate a series of supposed house structures ranging from 58 to 85 feet in length. Unfortunately, little material has survived from this site. A related component is the Byrns site near Forest, where material was salvaged from a gravel pit by Lambton College in 1968 (Notes in MCC files). Typical of both Crawford and Byrns are ceramics featuring horizontal collar motifs (ie. "Iroquois Linear" and "Ontario Horizontal").

Although Glen Meyer and Uren-like components are scattered throughout the Pinery area, and along the lower Ausable east of Thedford, the largest components are found to the southwest of the river near the villages of Arkona and Forest. There is a strong association between the location of these sites and the deep but spatially restricted sand and gravel deposits of the Lakes Arkona and Warren fossil beaches. This association between Glen Meyer sites and well drained sands is a phenomenon noted for other areas of Ontario. Glen Meyer is not well represented in the Maitland area, although there is a small component at the Kinburn Road site (Swayze 1972) by the Hullett swamp, possibly representing a short term hunting camp.

In contrast to the number of Early and Middle stage Iroquoian sites, there is remarkably little Late Prehistoric material of ca. 1400 A.D. and later. Although a few ephemeral traces attributable to this period have been found in the Ausable, these seem to represent briefly occupied camps. No village sites of this period have been documented for the area. There is little question that by ca. 1400 A.D. there was a depopulation of the Ausable area, although the reasons for this are far from clear. However, the presence of the large ca. 1400 A.D. Metcalfe site (W. Hagerty pers. com.) on the Sydenham River only 20 km southeast of Arkona, hints that village removal from the Ausable may not have involved any great distance.

Historic

Imaginative local histories of the area often suggest that the Ausable was a busy place in the

early 17th century, as for example in Sherwood Fox's 1958 book *'T ain't Runnin' No More* (it was the Ausable not Fox that weren't runnin'). Fox even had his artist Clare Bice produce a drawing showing the Jesuit Black Robes striding the beach at the Pinery (presumably in search for lost souls in the Grand Bend taverns). Archaeologically, however, there is not the slightest trace of early 17th century material, nor is there historical documentation to suggest that any major settlements existed in the area at this time -- certainly not a Jesuit mission as suggested by Fox and certain other historians. Nonetheless, small camps probably exist in the Kettle Point vicinity, since Kettle Point chert is fairly common on certain 17th century sites in the Petun area (e.g. Fox 1979). Some group, probably the Ottawa, were visiting the Point in the early historic period.

The first European to record a visit to the southeastern Huron shore was Galinee in 1670. No mention is made of resident Native people in his account. Sometime in the 18th century the Ausable area was reoccupied by Native people, for at this time the Ojibwa, originating from the north shore of Lake Huron, were beginning to settle throughout the southern Huron basin (Rogers 1978). Archaeological indications of this late historic occupation are scanty but late style trade axes have been found in several locales. Further, wire wound glass beads, beads ground from European white clay pipe stems and even a small portion of a trade silver hat or arm band have been recovered from the surface of the Simons site near Parkhill Creek (MCC Collections).

Much of the Ausable-Maitland drainage was surrendered by the Ojibwa in 1827 (Jacobs 1983), although two small reserves were established on the lakeshore, west of the Ausable. After 1827, European settlement in the Ausable-Maitland area rapidly expanded under the auspices of the Canada Company. Although one of the two reserves was given over to the Crown to become the Ipperwash military base, the other reserve at Kettle Point was retained. So, the Native occupation of the southeastern Huron basin, which began over 10,000 years ago, still continues today.

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